In the Claims:

Please amend the claims as follows:

Claim 1 (Currently amended) A sub-sea controller ~~(31)~~ located under the sea level for managing a plurality of tools in a sub-sea well installation, the sub-sea controller ~~(31)~~ comprising:

downloading means to download an application module ~~(35_m)~~ to the sub-sea controller ~~(31)~~; and

a virtual machine ~~(36)~~ to execute the downloaded application module ~~(35_m)~~.

Claim 2 (Currently amended) The sub-sea controller ~~(412)~~ according to claim 1, further comprising:

a native application ~~(47)~~ implemented within the sub-sea controller ~~(412)~~; and

a native interface ~~(48)~~ implemented within the sub-sea controller (412), the native interface ~~(48)~~ enabling the application module ~~(45_m)~~ to access the native application ~~(47)~~.

Claim 3 (Currently amended) The sub-sea controller ~~(412)~~ according to claim 2, wherein the native interface ~~(48)~~ enables the native application ~~(47)~~ to access the application module ~~(45_m)~~.

Claim 4 (Currently amended) The sub-sea controller ~~(412)~~ according to ~~any one of claims 2 or 3~~ claim 2, further comprising:

a native memory wherein the native application ~~(47)~~ is executed; and

a defined memory wherein the application module ~~(45_m)~~ is executed, the defined memory being distinct from the native memory.

Claim 5 (Currently amended) The sub-sea controller ~~(412)~~ according to ~~any one of claims 2 to 4~~ claim 2, further comprising:

a protection register, the protection register authorizing an access to the native application only if a key code is written therein.

accessing means to access the protection register from the application module.

Claim 6 (Currently amended) The sub-sea controller (~~45$_n$~~) according to ~~any one of claims 1 to 5~~ claim 1 wherein the application module (~~45$_n$~~) contains a driver for a tool.

Claim 7 (Currently amended) A sub-sea well installation comprising a sub-sea controller (~~31~~) according to ~~any one of claims 1 to 6~~ claim 1.

Claim 8 (Currently amended) A method for updating a software of a sub-sea controller (~~31~~) located under the sea level, the sub-sea controller (~~31~~) managing a plurality of tools in a sub-sea well, the method comprising:

downloading an application module (~~35$_n$~~) into the sub-sea controller (~~31~~); and

executing the application module (~~35$_n$~~) using a virtual machine (~~36~~) implemented within the sub-sea controller (~~31~~).

Claim 9 (Currently amended) The method according to claim 8, further comprising:

executing a native application (~~47~~) of the sub-sea controller (~~42~~) within the sub-sea controller (~~412~~);

executing a native interface within the sub-sea controller (~~412~~);

accessing the native interface from the native application (~~47~~) to exchange data with the application module (~~45$_n$~~).

Claim 10 (Currently amended) The method according to claim 8, further comprising:

executing a native application (~~47~~) of the sub-sea controller (~~42~~) within the sub-sea controller (~~412~~);

executing a native interface within the sub-sea controller (~~412~~);

accessing the native interface from the application module (~~45$_n$~~) to exchange data with the native application (~~47~~).

Claim 11 (Currently amended) The method according ~~to any one of claims 9 or 10~~ to claim 9, wherein the downloading and the executing of the application module (~~45$_n$~~) are

performed without interrupting an executing of the native application of the sub-sea controller (413).

Claim 12 (Currently amended) The method ~~according to any one of claims 9 to 11~~ of claim 9, further comprising:

executing the application module (45_n) in a defined memory;

executing the native application (45_n) in a native memory;

wherein the defined memory is distinct from the native memory.

Claim 13 (Currently amended) The method ~~according to anyone of claims 8 to 12~~ of claim 8 wherein the application module (45_n) contains a driver for a tool.